



ELECTRONICS

## Product Information

*SAMSUNG TFT-LCD*

**MODEL NO. : LTN141X7-124**

**SAMSUNG ELECTRONICS CO. LTD.**

|         |              |        |                 |      |       |
|---------|--------------|--------|-----------------|------|-------|
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# GENERAL DESCRIPTION

## DESCRIPTION

LTN141X7-124 is a color active matrix TFT (Thin Film Transistor) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching devices. This model is composed of a TFT LCD panel, a driver circuit and a backlight system. The resolution of a 14.1" contains 1,024 x 768 pixels and can display up to 262,144 colors. 6 O'clock direction is the Optimum viewing angle.

## FEATURES

- Thin and light weight
- High contrast ratio
- XGA ((1024x768) pixels) resolution
- Low power consumption
- DE (Data enable) only mode.
- 3.3V LVDS (FPD Link) Interface with 1 pixel / clock

## APPLICATIONS

- Notebook PC and desktop monitors
- Display terminals for AV application products
- Monitors for Industrial machine
- If the usage of this product is not for PC application, but for others, please contact SEC

# GENERAL INFORMATION

| ITEM              | SPECIFICATION                         | UNIT  | NOTE |
|-------------------|---------------------------------------|-------|------|
| Display area      | 285.696(H)X214.272(V) (14.1"diagonal) | mm    |      |
| Driver element    | a-Si TFT active matrix                |       |      |
| Display colors    | 262,144                               |       |      |
| Number of pixel   | 1024 x 768                            | pixel |      |
| Pixel arrangement | RGB vertical stripe                   | mm    |      |
| Pixel pitch       | 0.279(H) x 0.279(V) (TYP.)            |       |      |
| Display Mode      | Normally white                        |       |      |
| Surface treatment | HAZE (25), HARD-COATING (3H)          |       |      |

# Mechanical Information

| ITEM             |                | MIN.  | TYP.  | MAX.  | NOTE |
|------------------|----------------|-------|-------|-------|------|
| Module size (mm) | Horizontal (H) | 298.0 | 298.5 | 299.0 |      |
|                  | Vertical (V)   | 226.0 | 226.5 | 227.0 |      |
|                  | Depth (D)      | -     | -     | 6.0   |      |
| Weight           |                | 535g  | 550g  | 565g  |      |

# INPUT Interface Connection

## LVDS

Connector : 1524B-2041R,UJU

Mating Connector : JAE FI-SE20M-HF

| PIN NO | SYMBOL   | FUNCTION                     | POLARITY | REMARK                  |
|--------|----------|------------------------------|----------|-------------------------|
| 1      | VDD      | POWER SUPPLY +3.3V           |          |                         |
| 2      | VDD      | POWER SUPPLY +3.3V           |          |                         |
| 3      | GND      | GROUND                       |          |                         |
| 4      | GND      | GROUND                       |          |                         |
| 5      | RxIN0-   | LVDS Differential Data INPUT | Negative | R0~R5<br>G0             |
| 6      | RxIN0+   | LVDS Differential Data INPUT | Positive |                         |
| 7      | GND      | GROUND                       |          |                         |
| 8      | RxIN1-   | LVDS Differential Data INPUT | Negative | G1~G5<br>B0~B1          |
| 9      | RxIN1+   | LVDS Differential Data INPUT | Positive |                         |
| 10     | GND      | GROUND                       |          |                         |
| 11     | RxIN2-   | LVDS Differential Data INPUT | Negative | B2~B5,DE<br>Hsync,Vsync |
| 12     | RxIN2+   | LVDS Differential Data INPUT | Positive |                         |
| 13     | GND      | GROUND                       |          |                         |
| 14     | RxCLKIN- | LVDS Differential Data INPUT | Negative |                         |
| 15     | RxCLKIN+ | LVDS Differential Data INPUT | Positive |                         |
| 16     | GND      | GROUND                       |          |                         |
| 17     | NC       | No Connection                |          |                         |
| 18     | NC       | No Connection                |          |                         |
| 19     | GND      | GROUND                       |          |                         |
| 20     | GND      | GROUND                       |          |                         |

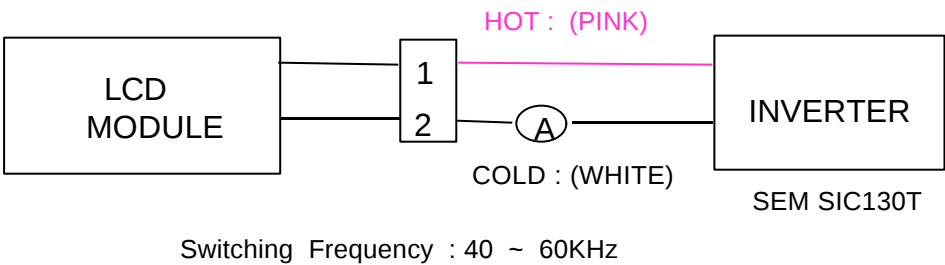
# BACK-LIGHT UNIT

The backlight system is an edge - lighting type with a single CCFT.

Ta = 25 ± 2 °C

| ITEM           | SYMBOL | MIN. | MAX. | UNIT  | NOTE |
|----------------|--------|------|------|-------|------|
| Lamp Current   | IL     | 3.0  | 6.0  | mArms | (1)  |
| Lamp frequency | FL     | 40   | 80   | kHz   | (1)  |

Note 1) Permanent damage to the device may occur if maximum values are exceeded  
Functional operation should be restricted to the conditions described under normal operating condition



Connector : JST BHSR - 02VS -1  
Mating Connector : SM02B-BHSS-1(JST)

## BACKLIGHT CONNECTOR PIN CONFIGURATION

| Pin NO. | Symbol | Color | Function     |
|---------|--------|-------|--------------|
| 1       | HOT    | Pink  | High Voltage |
| 2       | COLD   | White | Ground       |

